

## **REMARKS**

### **Status of the Claims**

Upon entry of the amendment above, claims 1-44 will be pending, claims 1, 28, and 34 being independent.

Claims 4, 5, 7-10, 12-15, and 17 stand withdrawn from consideration as being directed to one or more independent and distinct inventions. Upon review, however, Applicants submit that claims 7-10 are indeed encompassed by the elected invention.

Of newly added claims 23-44, claims 23-36 and 39-44 are directed to the elected invention and/or are generic to more than one invention.

### **Summary of the Office Action**

Claims 1-3, 6, 11, 16, and 18-22 are rejected under 35 USC §112, second paragraph, as being indefinite, as set forth in Section 5, beginning on page 2 of the Office action.

Claims 1-3, 6, 16, 18, 21, and 22 are rejected under 35 USC §102(e) as being anticipated by VEUX (U.S. Patent No. 6,435,537), as set forth in Section 7 of the Office action, beginning on page 3.

Claim 11 is rejected under 35 USC §103(a) as being unpatentable over VEUX, as set forth in Section 9 of the Office action, beginning on page 4.

Claims 19 and 20 are rejected under 35 USC §103(a) as being unpatentable over VEUX in view of FRECHIN, as set forth in Section 10 of the Office action, on page 5.

### **Response to the Office Action**

#### **A. Withdrawal of Rejection Under 35 USC §112, Second Paragraph**

In response to the rejection for indefiniteness under 35 USC §112, second paragraph, Applicants have introduced an amendment to claim 1 which is believed to resolve the issue raised by the rejection, in its entirety. By means of the amendment, Applicants believe that they have placed the limitation at issue in conformance with the Examiner's stated understanding.

Accordingly, withdrawal of the rejection is kindly requested.

**B. Claims Directed to the Elected Invention**

As mentioned above, Applicants submit that the invention defined by currently withdrawn claims 7-10 encompass the elected invention. Accordingly, Applicants request that such claims be examined and apologize for not having previously indicated their relevance.

In addition, of newly added claims (the subject matter of which is further described below), claims 23-36 and 39-44 are directed to the elected invention and/or are generic to more than one invention.

**C. Summary of Amendment**

In the amendment above, Applicants have introduced amendments to certain ones of the paragraphs of the specification. Certain of the amendments are made for improving the readability of the description. For example, in paragraph 0004, "an pivot" is changed to "a pivot." In paragraph 0028, "a flap strip" is changed to "a flat strip." In paragraphs 0045-0047, "forms" has been changed to "shapes." In paragraph 0048, "hooked by the hook" has been changed to "engaged by the hook" and "interposed on its trajectory" has been changed to "interposed on its path." Also, in paragraph 0042, the expression "tension spring" is introduced as an alternative (and, perhaps, a more commonly used expression) to "traction spring."

In paragraphs 0027 and 0045, the "lengthwise movement" of the flexible linkage 30 is mentioned, thereby providing an antecedent for the expression in the claims. In paragraph 0038, the words "vertically beneath" have been added in describing the location of transverse bar 50 (*i.e.*, substantially in an area vertically beneath an ~~corresponding to the~~ area of the metatarsophalangeal articulation zone of the user's foot"). A similar amendment has been made to paragraph 0055. Antecedent basis is thereby provided for an amendment that has been made to claims 29, 30, and 34.

In independent claim 1, Applicants have replaced "distinct from" to "independent of," in the description of the relationship between the retaining system and the elastic return system. This amendment is supported at least in original paragraphs 0007, 0021, and 0035 of the specification.

Cosmetic changes have been made to claims 2, 9, and 10, *i.e.*, to improve their form.

New claims 23-44 have also been added, the substance of which is addressed below.

No prohibited new matter has been introduced by amendment.

**D. Withdrawal of Rejections Based Solely or Partially Upon VEUX**

At least for the reasons given below, Applicants request that the three grounds of rejection, based solely or partially upon VEUX be withdrawn.

Among the reasons that Applicants request the rejections be withdrawn are those that relate to two limitations that appear in independent claim 1, *viz.*, (1) the retaining system being independent of the elastic return system; and (2) the flexible linkage cooperating with at least one return member.

In addition, Applicants submit that certain dependent claims include limitations that are not anticipated or suggested by VEUX, whether considered alone or in combination.

**1. Retaining System is Independent of the Elastic Return System**

The invention is directed to a binding to connect a boot (*i.e.*, an article of footwear) onto a sports apparatus, such as a ski or a skate. The front of the boot is to be connected by the binding, permitting the rear of the boot to be moved up and down during use of the sports apparatus, particularly as the user strides alternately with such apparatus on right and left legs. This is characteristic of the sports of cross-country skiing and skating, for example.

The front of the boot is retained against release by a retaining system, such as shown in Figs. 4-7, as an example of the invention, in which a movable jaw 52 and fixed jaw 56 capture and retain a front connector 48 of the boot.

In addition, the invention includes an elastic return system, such as shown in Fig. 7, for example, which can include an elastic member (such as spring 20) and a flexible linkage (such as linkage 30), the flexible linkage extending between the boot and the sports apparatus. The elastic return system performs the function of returning (or assisting in returning) the rear of the boot to a low position on the sports apparatus, *i.e.*, whereby the entirety of the boot (front and rear) are thereby supported thereon. This is described, for example, in paragraph 0007 of Applicants' specification.

*Unlike known devices, the retaining system of Applicants' invention is independent of the elastic return system.* In other words, as mentioned in paragraph 0035, even if the linkage (element 30, *e.g.*) were to fail or break, the retaining system continues to prevent the release of the boot from the sports apparatus.

In contrast to the invention, if the element 50 of the device of VEUX were to fail or break, the boot would no longer be retained against release. *As explained in column 3, lines 27-42 of VEUX, the retaining system includes the "elastic catching wire 50" as well as the front stop/stirrup 60, i.e., the elastic catching wire is part of VEUX's retaining system.* If the element 50 were to break or become disconnected from the boot, the boot could move rearwardly away from the front stop/stirrup 60 and thereby be released from the ski or other sports apparatus to which it had been connected.

Consequently, unlike Applicants' invention as defined in claim 1, VEUX fails to teach or suggest a "retaining system being *independent* of the elastic return system." Instead, element 50 of VEUX is part of VEUX's retaining system.

## **2. The Flexible Linkage Cooperates With at Least One Return Member**

The elastic return system of Applicants' invention recited in claim 1 includes a *return member* with which the flexible linkage cooperates. In Applicants' illustrated embodiments, the return member takes the form of element 34 which deflects or guides the flexible member so that

it extends upwardly to the attachment to the boot. Paragraph 0026 of Applicants' specification describes the purpose of the return member with regard to the embodiment shown in Figs. 1-3, and paragraph 0055 describes the function and location of the return member in connection with all illustrated embodiments.

In the rejection, VEUX's element 53 is identified as a "return member." VEUX's element 53 is not a return member in the context of Applicants' claimed invention, nor, Applicants submit, in an understanding of the ordinary meaning that should be attributed to the expression "return member."

Instead, element 53 is described by VEUX as "curved ends" of the "catching wire" 50 (element 50 having been identified in the rejection as Applicants' claimed "flexible linkage") that cooperate with the shoe hook 17 and which are journaled on the rear of the carriage 40. See column 3, lines 27-33 of VEUX.

Further, Applicants' dependent claims 2 and 3 provide further specificity to the limitation "return member," which claims describe the invention in a way that is even more remote from that which is disclosed by VEUX, including the curved ends 53 of the catching wire 50.

Certainly, curved ends 53 of the catching wire 50 cannot be regarded as "pulleys" as identified in Applicants' claim 3.

In *Webster's II New Riverside University Dictionary*, Houghton Mifflin Company, 1984, Boston, Massachusetts, page 953, "pulley" is defined as "1. A simple device for changing the direction and point of application of a pulling force ...."

In *The American Heritage Dictionary of the English Language*, Houghton Mifflin Company, 2000, Boston, Massachusetts, page 1419, "pulley" is also defined as "2. A wheel turned by or driving a belt."

Applicants respectfully submit that VEUX's curved arms 53 are not described by either of the foregoing definitions.

### **3. VEUX Fails to Disclose a Flexible "Strip" Linkage Member**

In dependent claim 2, Applicants describe the flexible linkage as having, on a first side of the return member, a portion connected to the elastic member and extending in a substantially horizontal direction, and, on a second side of the return member, a portion connected to the boot and extending in a direction substantially parallel to a direction of relative movement of the boot in relation to the binding device.

In particular, in claim 2 Applicants describe a portion of the flexible linkage between the return member and the boot as "extending in a direction substantially parallel to a direction of relative movement of the boot in relation to the binding device." See, for example, Applicants' paragraph 0055 of the specification, which describes that the location of the return member in the illustrated embodiments provides for the relationship described in claim 2.

In contrast, the "catching wire 50" of VEUX extends almost perpendicular to such direction (see the side view, such as Fig. 4); not substantially parallel.

### **4. VEUX Fails to Disclose a Flexible "Strip" Linkage Member**

In dependent claim 6, Applicants further define the linkage member of their invention as a "strip." VEUX's "catching wire" is not believed to be encompassed by Applicants' recitation of a "strip."

### **5. One Skilled in the Art Would not Consider a Combination of VEUX and FRECHIN**

FRECHIN discloses an *alpine ski binding*, whereby the heel and toe of the boot are either completely fixed to the ski or released from the ski (except for the cable 6 that permits the ski to be tethered to the skier).

The adjusting mechanism of FRECHIN is essentially provided for setting the amount of force necessary to cause the release of the binding.

Because VEUX's binding is a cross-country type of binding, that is not releasable as is

a binding for an alpine ski, *one of ordinary skill would have no reason to be concerned with setting a release force for VEUX's binding*. Accordingly, he/she would not look to FRECHIN or other such disclosure for a teaching or suggestion to modify VEUX's binding.

Further, the retaining system of Applicants' invention is *independent* of the elastic return system, of which the elastic member of claims 19 and 20 is a part and, therefore, setting a release force, with which FRECHIN is concerned, would not be relevant.

For all of the foregoing reasons (*i.e.*, mentioned in sections D.1. - D.4., reconsideration and withdrawal of the rejections are kindly requested.

**E. New Claims 23-44**

As mentioned, new claims 23-44 have been added.

Claims 23-28 depend from independent claim 1. In claim 23, Applicants call for the flexible member to be lengthwise movable relative to the return member during movement of the rear of the boot between the low and high positions. Of course, the "catching wire" is not lengthwise movable.

Claim 24 describes the flexible linkage as extending to the return member in a first direction and extending from the return member in a second direction different from the first direction.

Claim 25 describes the flexible linkage as comprising a *flat strip*. VEUX's illustrated "catching wire" 50 is not believed to be properly characterized as a flat strip.

Claim 26 further mentions the flexible linkage as passing *beneath the return member*. This limitation is not believed to be taught or suggested by VEUX.

Claim 27 describes in further detail the "independence" of the retaining system vis-à-vis the flexible linkage of the elastic return system, *i.e.*, the retaining system being adapted to retain the boot against release from the sports article independent of a connection of the boot to the flexible linkage.

Claim 28 is independent and claims 29-33 depend therefrom.

In claim 28, Applicants claim a binding device for binding a boot to a sports article, which comprises (1) a **retaining system** adapted to connect a front of the boot to the sports article for use in a sport requiring a rear of the boot to be moved with respect to the sports article repeatedly from a low position and a high position and from the high position to the low position; (2) an **elastic return system** for exerting an elastic return force to urge the boot toward the low position, the elastic return system comprising (a) at least one elastic member and (b) a flexible linkage having a first end connected directly or indirectly to the elastic member and a second end adapted to be connected directly or indirectly to the boot, the flexible linkage being movable lengthwise during movement of the rear of the boot between the low and high positions as energy is transferred to and from the elastic member; the binding further comprising (3) a **guide for the flexible linkage during the lengthwise movement of the flexible linkage**, a portion of the flexible linkage between the first and second ends of the flexible linkage being in engagement with the guide as the boot is moved between the low and high positions; whereby (4) the retaining system is adapted to retain the boot against release from the sports article **independent of a connection of the boot to the flexible linkage**.

Of course, in VEUX there is no independence between the retaining system and an elastic return system, nor lengthwise movement of a flexible linkage, nor a guide for same.

Claim 29 further specifies the location of the guide, *i.e.*, substantially in an area vertically beneath a metatarso-phalangeal articulation zone of a user's foot.

Claim 30 depends from claim 29 and further specifies that the guide is positioned rearward less than 3 centimeters of the aforementioned metatarso-phalangeal articulation zone, as mentioned in paragraph 0055 of the specification.



Claim 31 further specifies that the retaining system comprises a fixed jaw and a movable jaw which latch a connector of the boot.

Claim 32 is further directed to the flexible linkage, which is described as extending to the guide in a first direction and extending from the guide in a second direction different from the first direction.

Claim 33 further characterizes the flexible linkage as a "substantially *inextensible* flat strip." VEUX's catching wire 50 is not believed to be properly characterized as "flat."

Claim 34 is independent and claims 35-44 depend therefrom.

In claim 34, Applicants claim a binding device for binding a boot to a sports article, which comprises (1) a **retaining system** adapted to connect a front of the boot to the sports article and to allow a rear of the boot to be moved with respect to the sports article between a low position and a high position; (2) an **elastic return system** for elastic return of the boot to the low position; (3) **the retaining system being independent of the elastic return system**; (4) the elastic return system comprising (a) an **elastic member** to be connected to the sports article; (b) a **flexible linkage** extending from a first end to a second end, between the elastic member and a connection with the boot, the flexible linkage cooperating with at least one return member; (b) **the second end of the flexible linkage being positioned in the binding device to be adapted to be located substantially in an area vertically beneath a metatarso-phalangeal articulation zone of a user's foot.**

In VEUX there is no independence between the retaining system and an elastic return system, nor lengthwise movement of a flexible linkage, nor a return member for same in the context of the invention.

New claims 35-44 relate, respectively, to the subject matter of claims 2-11.

**F. Information Disclosure Statement**

In an information disclosure statement being filed concurrently herewith, Applicants are bringing to the attention of the Examiner U.S. Patent No. 5,366,235, which was recently cited (February 28, 2005) in a search report (as a family member of DE 41 43 410) in connection with a foreign application unrelated to the instant application.

The patent is direction to a system for ski jumping. It explains that for ski jumping a heel strap is useful to determine a pre-defined angle between the ski and the boot during the "flight" phase of the jump. During landing, it is desirable to have a larger angle, therefore needing to make somehow the effective length of the strap longer. Therefore, the patent shows several embodiments, some of them showing a flexible link, a spring, and a deflecting member. Nevertheless, the patent is not relevant to the invention at least because the embodiments disclosed do not show an elastic return system for elastic return of the boot to the low position. In the patent it appears that the elasticity of the heel-returning system is used to permit an extra swiveling of the boot during the landing phase of a jump.

**SUMMARY AND CONCLUSION**

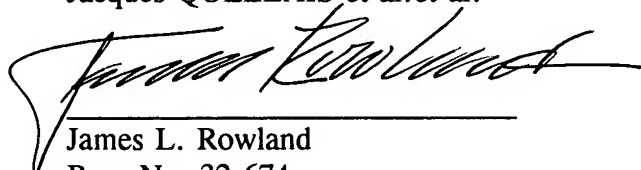
The grounds of rejection advanced in the Office action have been addressed and are believed to be overcome. Reconsideration and allowance are respectfully requested in view of the amendment and remarks above.

A check is enclosed for payment of a claim fee and a fee for an extension of time. No additional fee is believed to be due at this time. However, the Commissioner is authorized to charge any fee required for acceptance of this reply as timely and complete to Deposit Account No. 19-0089.

Further, although an extension of time for a single month is believed to be necessary at this time, if it were to be found that an additional extension of time were necessary to render this reply timely and/or complete, Applicants request an extension of time under 37 CFR §1.136(a) in the necessary increment(s) of month(s) to render this reply timely and/or complete and the Commissioner is authorized to charge any necessary extension of time fee under 37 CFR §1.17 to Deposit Account No. 19-0089.

Any comments or questions concerning this application can be directed to the undersigned at the telephone or fax number given below.

Respectfully submitted,  
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